

IN THE CLAIMS:

D1
sub E1
6. (Amended) The eukaryotic cell of claim 1 wherein a cytoplasmic part of the chimeric receptor is a cytoplasmic part of at least one interferon receptor subunit.

D2
sub E2
11. (Thrice Amended) A method of screening a compound that inhibits the binding of a ligand with the extracellular part of a chimeric receptor and/or with the signaling pathway of the cytoplasmic part of a chimeric receptor, the method comprising:
providing the eukaryotic cell of claim 1;
contacting said eukaryotic cell with said compound; and
selecting cells in which the cell's reporter system is inactivated.

D3
sub E3
15. (Twice Amended) A method of screening for an orphan receptor and its unknown ligands comprising:
providing a eukaryotic cell comprising:
a first recombinant gene encoding a chimeric receptor;
a library of recombinant genes encoding at least one compound, the expression of which creates an autocrine loop;
a reporter system that is activated upon the creation of said autocrine loop; and
selecting cells in which the cell's reporter system is activated.

D4
sub E4
16. (Amended) The method according to claim 24 wherein said series of compounds comprise genes encoding said antagonists.

D4
sub E4
17. (Amended) The method according to claim 16 wherein said antagonists create the autocrine loop.

D4
sub E5
18. (Amended) The method according to claim 15 wherein said unknown ligands are produced by the autocrine loop.

Please add the following new claim:

24. (New) A method of screening for antagonists interfering with ligand-receptor binding comprising:

providing a eukaryotic cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound, the expression of which creates an autocrine loop;

a reporter system that is activated upon the creation of said autocrine loop;

reacting a series of compounds with said eukaryotic cell;

assaying the activity of each compound of said series of compounds; and

based on said assaying, determining the presence of an antagonist.

Please cancel claim 19 without prejudice or disclaimer.